1106-60-486 **Richard Kenyon** and **Mei Yin*** (mei.yin@du.edu), 2280 S Vine St, Denver, CO 80208. *On the asymptotics of constrained exponential random graphs.*

The unconstrained exponential family of random graphs assumes no prior knowledge of the graph before sampling, but in many situations partial information of the graph is already known beforehand. A natural question to ask is what would be a typical random graph drawn from an exponential model subject to certain constraints? Using the theory of large deviations, we present some general results for the constrained model and in particular the exact asymptotics for the conditional normalization constant. Part of this talk is based on joint work with Richard Kenyon. (Received August 30, 2014)